

Claims

1. A mobile communications terminal comprising: a signal receiving means for receiving a plurality of multipath signals associated with radio signals transmitted from a plurality of base stations using a common channel; a maximum-ratio-combining means for dividing the plurality of multipath signals received by said signal receiving means into groups by base station, i.e., by transmit source, for maximum-ratio-combining a plurality of multipath signals associated with each same base station which is a transmit source into a composite signal, and for outputting the composite signal; a decoding means for decoding the composite signal outputted from said maximum-ratio-combining means; and a selecting means for selecting a composite signal having a good decoded result from among composite signals decoded by said decoding means.

2. The mobile communications terminal according to Claim 1, characterized in that said maximum-ratio-combining means divides only multipath signals associated with radio signals transmitted from base stations to be monitored which are included in the multipath signals associated with the radio signals received by said signal receiving means into groups by base station, i.e., by transmit source, and maximum-ratio-combines a plurality of multipath signals associated with each same base station which is a transmit source into a composite signal.

3. The mobile communications terminal according to Claim 2, characterized in that said mobile communications terminal

includes an update requesting means for comparing reception levels of the radio signals transmitted from the plurality of base stations, and for transmitting a request to update the base stations to be monitored according to a result of the
5 comparison.

4. The mobile communications terminal according to Claim 2, characterized in that said mobile communications terminal includes a monitor target updating means for receiving required
10 broadcast information from a base station when updating the base stations to be monitored, and for referring to the broadcast information to update the base stations to be monitored.

5. The mobile communications terminal according to Claim
15 3, characterized in that the monitor requesting means receives information indicating a power ratio between a power of a pilot channel and that of a common channel from the plurality of base stations in advance, and estimates the reception levels of the radio signal transmitted from the plurality of base stations
20 using the common channel from both the reception levels of the radio signals transmitted from the plurality of base stations using the pilot channel, and the power ratio.

6. A radio communications system including a plurality
25 of base stations each for transmitting a radio signal using a common channel; and a mobile communications terminal for, when receiving a plurality of multipath signals associated with radio signals transmitted from the plurality of base stations using the common channel, dividing the plurality of multipath
30 signals into groups by base station, i.e., by transmit source,

maximum-ratio-combining a plurality of multipath signals associated with each same base station which is a transmit source into a composite signal, decoding the composite signal, and selecting a composite signal having a good decoded result
5 from among decoded composite signals.

7. The radio communications system according to Claim 6, characterized in that said mobile communications terminal divides only multipath signals associated with radio signals
10 transmitted from base stations to be monitored which are included in the multipath signals associated with the radio signals transmitted from the plurality of base stations into groups by base station, i.e., by transmit source, and maximum-ratio-combines a plurality of multipath signals
15 associated with each same base station which is a transmit source into a composite signal.

8. The radio communications system according to Claim 7, characterized in that said mobile communications terminal
20 compares reception levels of the radio signals transmitted from the plurality of base stations, and transmits a request to update the base stations to be monitored according to a result of the comparison.

25 9. The radio communications system according to Claim 7, characterized in that said mobile communications terminal receives required broadcast information from a base station when updating the base stations to be monitored, and refers to the broadcast information to update the base stations to be
30 monitored.

10. The radio communications system according to Claim 8, characterized in that said mobile communications terminal receives information indicating a power ratio between a power of a pilot channel and that of a common channel from the plurality of base stations in advance, and estimates the reception levels of the radio signal transmitted from the plurality of base stations using the common channel from both the reception levels of the radio signals transmitted from the plurality of base stations using the pilot channel, and the power ratio.